

NOVEMBER/DECEMBER 2025

**23USDA43 — DATA MINING AND
WAREHOUSING**

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define Data Mining.
2. What is Data Cleaning?
3. What are Data Mining Primitives?
4. Define Concept Description.
5. What is an Association Rule?
6. Differentiate between single-dimensional and multi-level association rules.
7. List two issues in Classification.
8. What is Bayesian Classification?
9. Define Cluster Analysis.
10. Write two applications of Hierarchical Clustering.



SECTION B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) Explain different types of data pre-processing.

Or

- (b) Describe Data Integration and Transformation.

12. (a) Write about Data Mining Query Language.

Or

- (b) Explain the architecture of Data Mining Systems.

13. (a) Explain multi-level association rules with example.

Or

- (b) Describe Apriori algorithm briefly.

14. (a) Write short notes on Decision Tree Induction.

Or

- (b) Explain the role of Backpropagation in classification.

15. (a) Explain partitioning methods in clustering.

Or

- (b) Discuss density-based methods in clustering.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Explain Data Warehousing and Data Pre-processing in detail.

17. Discuss the components of Data Mining System Architecture with a neat diagram.

18. Explain Association Rule Mining process with suitable examples.

19. Describe Bayesian Classification and Decision Tree Induction with examples.

20. Explain various clustering methods in detail.

